Atty. Docket No.: 31775-221177

**REMARKS** 

Reconsideration of the outstanding Office Action is respectfully solicited.

In applicants' view, the claims speak for themselves and are free of art rejections as asserted in the outstanding Office Action. Applicants rely on Section 2131 of the MPEP. The MPEP indicates, in accordance with case precedent, that a reference applied as an anticipation must independently satisfy two criteria. 1] "the reference must teach every element of the claim" and 2] the reference contains an 'enabled disclosure.' Please see 2131 and 2131.01 I. In applicants' view, the analysis made by the USPTO does not use the inquiries which are sanctioned by the MPEP; but is rather looking to determine whether the claim(s) is(are) open. The claim 1 is open; however, the recited "organic compound" is the same as the definition of "organic compound" in the finally rejected claims. The language "selected from the group consisting of..." is presented to address the Examiner suggestion that the definition of organic compounds [in e.g., Claim 1] embraces sulfides; that appears to be a misconstruction of the literal claim language "organic compound". In applicant's view, Fujiyama and Heyningen completely differ from our invention.

Applicants respectfully traverse the rejection of claims 1-5, 7-9 over Fujiyama et al (US 2003/085387 A1 = WO 01/192925 A1 = EP 1 291 679 A1) under 35 U.S.C. § 102.

5

Atty. Docket No.: 31775-221177

Fujiyama et al. disclose a fiber optical material which is used for the core of an optical waveguide. According to formula 1 on page 1, optical materials are all aromatic sulfides which comprise condensed aromatic ring systems but which are as a whole - not the recited condensed aromatic ring system. The Examiner's attention is directed to Fujiyama Abstract and to page 3, paragraph 00036 which describes the formula

"These optical materials each comprises at least one aromatic sulfide compound represented by the following formula (1):

$$A-(S-B^k)_n \tag{1}$$

..."

All of the text in the outstanding Office Action at page 3 referring to Fujiyama paragraphs 0065, 0079, 0069, 0072, 0081 and 0083 relates to definition of A- and  $B^k$ -. However, the Fujiyama does not describe

organic compound is a condensed aromatic ring system of two more isocyclic ring systems and a condensed aromatic ring system of heterocyclic aromatic rings, wherein each heteroatom is selected from the group consisting of nitrogen and oxygen and is assigned to precisely one ring if the ring is heterocyclic. [finally rejected Claim1]

Specifically, Fujiyama fails as an anticipatory reference as to both MPEP requirements of an anticipatory reference.

Fujiyama et al. only deals with aromatic sulfides and this would not describe the compounds in the rejected claims to a person skilled in the art. Moreover, although this is incidental because of the failure of the written description in Fujiyama, Fujiiyama also fails to satisfy the enablement requirement, required by the

Atty. Docket No.: 31775-221177

MPEP of a reference applied as anticipation. Thus it is clear under the law expressed as precedent in the MPEP – which thus constitutes PTO policy--that the Fujiyama reference does not constitute an anticipatory reference. In this respect applicants would argue the dependent claims independently of Claim 1, as they are clearly free of Fujiyama and further support of the patentability.

Applicants respectfully traverse the rejection of claims 1-5, 7-8, 10-11, and 13-14 over Heyningen [2003/161605]. Heyningen teaches optical devices for modulating light which necessarily comprise an electro-optical compound. The difference between an electro-optical compound and an organic component as comprised in our application can be easily derived from the equation in section [0003] of Heyningen: Whereas electro-optical compound always influences hyperpolarizability (beta, gamma) of the material, all organic components of our application can only influence the linear polarizability (alpha).

Heyningen influences the hyperpolarizability by employing optical active *chiral polymers*. By comparison, none of applicants' organic components are polymers. Please see Heyningen paragraph 0034 for an example of a chiral polymer. Applicants' organic compounds are described <u>inter alia</u> in sections [0011], [0012], [0013], [0015] and [0016] of the application:

[0011] isocyclic systems comprising more than one carbon ring with the individual carbon ring having joint carbon atoms

[0012] esp. carbon atoms belonging to a single carbon ring are replaced with hetero atoms in a condensed aromatic ring system [Fujiyama's compounds

Atty. Docket No.: 31775-221177

are not condensed aromatic ring systems

[0013] pref. condensed aromatic ring systems with three rings

[0015] esp. heterocyclic condensed aromatic ring systems in which each

hetero atom is clearly assigned to a ring

[0016] also condensed aromatic ring systems with two rings which comprise

nitrogen and/or oxygen atoms as hetero atoms.

Lastly, a technical reason for the novelty and unobviousness of applicants'

invention lies in the specific organic compounds which are recited; compared to the

applied references applicants' invention is simplicity and ease of availability.

Applicants' components can simply be bought and incorporated into a polymer; By

comparison, the substances taught in Fujiyama or Heyningen both must first be

synthesized in a rather complicated way. The efficacy of applicants' invention is

surprising in view of the requirements of either reference.

Reconsideration and an early allowance are respectfully solicited.

Date: August 3, 2007

Marina V. Schneller

Respectfully submitted

Registration No. 26,032

**VENABLE** 

P.O. Box 34385

Washington, D.C. 20043-9998

Telephone: (202) 344-4000

Telefax: (202) 344-8300

MVS

DC2DOCS1/879587

8